

MAY 2011

Communication Arts

Save the Date!!

August 17, 2011 is the Northwest Montana Reading Conference featuring keynote speaker Linda Rief. Look for more information in upcoming CSIs.

Surveys of Enacted Curriculum

The Surveys of Enacted Curriculum (SEC) are a practical reliable set of data collection tolls being used with teachers of mathematics, science, and English language arts (K-12) to collect and report consistent data on current instructional practices and content being taught in classrooms. Teachers complete the survey questions through an online Web-based system. Upon completion, the group data are reported in user-friendly charts and graphs to facilitate analysis of differences and similarities across classrooms, schools or districts. The SEC instruments and resulting data provide an objective method for educators to analyze the degree of alignment between current instruction and state content standards (including the Common Core State Standards) and assessments. For more information, please contact Kris Goyins by e-mail, kgoyins@mt.gov or telephone, (406) 444-0729.

International Children's Digital Library

http://en.childrenslibrary.org/

The International Children's Digital Library Foundation is building a digital library of outstanding children's books from around the world. Check it out!

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Library-Information Literacy

Montana Teacher-Librarian Wiki

Visit www.opi.mt.gov/groups/mtl for information about professional development opportunities and resources for Montana Teacher-Librarians.

Some Resources I Learned About at the Montana Library Association Conference

- Children's Digital Library
- <u>Instructional Architect</u>
- Library Guides
- Butte Digital Image Project Butte Neighborhoods
- Galaxy Zoo

Take a Fresh Look at the Civil War

Records left by the participants themselves—letters, orders, maps, telegrams, photographs and broadsides—and preserved in the National Archives provide new insight into the Civil War. To complement these primary sources, the Archives education specialists have produced articles with companion lesson plans related to Civil War history. Teaching with Documents contains reproducible copies of primary documents from the holdings of the National Archives and Records Administration and teaching activities correlated to social studies standards that include cross-curricular connections. Offerings include "Fugitive from Labor Cases: Henry Garnett (1850) and Moses Honner (1860)"; "The Civil War as Photographed by Mathew Brady"; "The Fight for Equal Rights: Black Soldiers in the Civil War"; "Letters, Telegrams, and Photographs Illustrating Factors That Affected the Civil War"; "Confederate Sympathizers in New Mexico During the Civil War"; "Georgia: The Atlanta Campaign of 1865—The Camera at War"; "Teachable Texts from the National Archives at New York City"; and "The Union Blockade: Lincoln's Proclamations." To help students explore these collections, have them use the links Search for documents, Collect favorites and Create a poster, movie or pathway challenge. Click Here to Visit Web Site Click Here to View All Resources



Learn About the Building Where Democracy Happens

The **U.S. Capitol** in Washington, D.C., is a symbol of the American people, a showcase of history and the meeting place of the nation's leadership. The Capitol also houses an important collection of American art, and it is an architectural achievement in its own right. Visit the **Architect of the Capitol** (AOC) Web site to learn the story of the Capitol and its architect. In the **Capitol Campus Multimedia** section of the site, you can enter the Virtual Capitol, take an interactive look at Capitol Hill and view stunning 360° views of the Hill. You can also view videos on the AOC's YouTube channel. Among the featured videos are Sustainability at the Capitol, a Capitol Campus Flyover, Sunset at the Capitol, the Capitol Building and the Jefferson Building Murals. This section of the Architect of the Capitol Web site also offers downloadable, high-quality **digital images** in JPEG format. The images are in the public domain. Click Here to Visit Web Site Click Here to View Capitol Campus Multimedia

<u>American Association of School Librarians (AASL) Launches Database to Collect Lesson Plans</u>

AASL announces the launch of the *Standards for the 21st-Century Learner Lesson Plan Database*, a public, online database providing school librarians a fast and user-friendly way to create and share quality lesson plans with their peers.

Building on the template provided in *Standards for the 21st-Century Learner In Action*, the Lesson Plan Database is an interactive resource and tool to support school librarians and other educators in teaching the essential learning skills defined in the AASL learning standards. The database serves as a catalyst for collaboration, as school librarians and teachers work together to create projects that weave content and skills into engaging learning activities.

AASL Advocacy Brochure Series Helps School Librarians Speak to Stakeholders

Developed and distributed through a grant from the Bound to Stay Bound Books Foundation, the American Association of School Librarians (AASL) presents a new advocacy tool to help school librarians generate and guide discussion with stakeholders about quality school library programs. <u>School Library Programs Improve Student Learning</u> is a series of advocacy brochures each designed to speak to a specific stakeholder audience within the school library community, including administrators, policymakers, parents, and teachers.

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Mathematics



Montana Learning Center (MLC) has partial scholarships of \$50 and \$100 for summer Kids Camps and Family Camp to distribute on a need basis. The form may be downloaded from each of the Kids Camps and Family Camp sites at www.montanalearning.org. Check out the other programs including the New Family Camp.

The White House has announced this year's winners of the **2010 Presidential Awards for Excellence in Mathematics and Science Teaching.** Recognition events are planned for May 17-20, 2011 in Washington, D.C. Congratulations to Montana's Presidential Awardees for Excellence in Mathematics and Science Teaching. Courtney Niemeyer from Billings is the Mathematics Awardee. The Montana Science Awardee is Jon Konen from Great Falls. Read their profiles.

Courtney Niemeyer

http://recognition.paemst.org/media_room/finalist_profiles/courtney_niemeyer

Jon Konen http://recognition.paemst.org/media room/finalist profiles/jon konen

COMMON CORE STATE STANDARDS

A new set of English Language Arts and Mathematics Content Standards based on the Common Core State Standards with Indian Education embedded will be recommended for adoption at the May Board of Public Education (BPE) meeting in Great Falls. If you are interested in the information to be presented to the BPE it can be found on pages 158 – 264 of the agenda packet. The BPE Web page: http://bpe.mt.gov/meetings.mcpx.

Remember, an updated online presentation about the Common Core State Standards can be found on Page including CCSS presentation





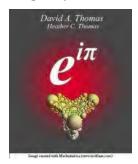
Study buddy delivers free online peer math tutoring to students nationwide The National Science & Technology Education Partnership (NSTEP), a non-profit organization, is using the power of cutting edge technology to help and inspire students to achieve academic success in math. Their signature program, "Study Buddy - Online Math Homework Help," links minority and low-income students who are struggling in math with volunteer high school honor students in a completely online, collaborative program. To learn more about Study Buddy, visit www.studybuddyhelp.org.

Professional resource supporting implementation of Common Core State Standards

http://www.insidemathematics.org/

- classroom examples of teaching methods and insights into student learning
- Rich mathematics tasks and full sets of student work
- Tools for mathematics instruction and assessment
- Reflective video interviews with teachers and students

A book from a Montana math educator: Last summer 14 year old Andy Green found an electronic game on a visit to a dinosaur dig. What he couldn't know is that the game was lost 65 million years ago by a child from an alien civilization. In that culture, when a student solved this puzzle, a mentor was summoned. When Andy and his friends solve the puzzle, they encounter an alien and are drawn into a conflict that spans the galaxy.



Other Books to read this summer (please send Jean a review):

Drive: The Surprising Truth about what Motivates Us by Daniel H. Pink

Crimes and Mathdemeanors by Leith Hathout

<u>Do the Math: The Writing on the Wall</u> by Wendy Lichtman

<u>Do the Math: Secrets, Lies, and Algebra</u> by Wendy Lichtman

<u>Shop Class as Soulcraft: An Inquiry into the Value of Work</u> by Matthew B. Crawford



<u>The Secrets of Facilitation: The S.M.A.R.T. Guide to Getting Results with Group</u> by Michael Wilkinson

Kids love to practice mental addition. Can you add two numbers together? Do you love the challenge - and satisfaction of solving a great puzzle? Kakooma™ puzzles are deceptively simple, yet fiendishly difficult. You'll be hooked - and won't realize that math is getting surprisingly...easy! It's amazing, mind-sharpening, brain-tastic fun for all ages. What are you waiting for? It's time to Kakooma™! Take a test drive on http://www.kakooma.com/ then get the App.

Interactive Institute- High School Math NCTM new professional development experience to promote reasoning and sense making in secondary mathematics classrooms. Improve your understanding, gain strategies, learn to select, develop, and use engaging tasks, initiate an action plan July 28-30 in Orlando, Florida: www.nctm.org/reasoning.

Check out the summer Professional Development Academies, current news, opportunities and scholarships at <u>Montana Council of Teachers of Mathematics</u>.

This Wiki is perfect to share with students, parents, and others for Summer Fun!!! Web 2.0 for the Math Classroom is a collection of links that include puzzles, math games, skill practice and more.

Jean Howard, Mathematics Curriculum Specialist jhoward@mt.gov





Science

Are you familiar with the ELEs?

A useful instructional tool that you may not be familiar with are the <u>Montana Essential Learning Expectations for Science</u>, or ELE. The ELE provide further clarification of the content that students must know and understand along the K-12 continuum. Many educators find these documents helpful as they provide more specific instructional targets for each grade level. The ELE have been developed for the following content areas: science, mathematics, communication arts, information literacy/library media, and technology. If you haven't taken a look at them recently, check them out at the following link: <u>Essential Learning Expectations</u>.

The National Board for Professional Teaching Standards (NBPTS) is accepting applications for the committee responsible for reviewing and revising *Science Standards* in early adolescence and adolescence through young adulthood. Early adolescence refers to teachers of students ages 11-15. Adolescence and young adulthood refers to teachers of students ages 14-18+.

To access the online application go to: http://www.surveymonkey.com/s/NBPTSScience . The application will be available through May 31, 2011.

Free Resource!

The Department of Natural Resources and Conservation Rangeland Resource Program has some excellent teaching tools for students and educators that are FREE! An educator can order the Rangeland poster for each student in the classroom. These posters have been distributed at two different Earth Day events and the kids love them! There are also lesson plans that accompany the poster that educators can obtain at no charge.

To take advantage of these great resources go to: http://dnrc.mt.gov/cardd/consdist/posters/default.asp





Engineering: Check Out the World's Largest LEGO® Tower!

In the parking lot of a shopping center in Sao Paulo, Brazil, over 6,000 children and parents spent four days building the world's tallest LEGO® tower. Standing at 102 feet and made from 500,000 LEGO® bricks, it broke the previous record set by Chile in 2008 by 9.8 inches. LEGO® sent designers from Denmark for the world record attempt, and Brazilian soccer star, Cafu, was given the honor of placing the final piece. To see this amazing tower and for a video on its construction, visit the following Web site:

http://students.egfi-k12.org/and-now-the-worlds-tallest-lego-tower/

FREE Project Learning Tree Training!

If you aren't familiar with Project Learning Tree, you do <u>not</u> want to miss this <u>free</u> upcoming workshop in Anaconda. Project Learning Tree is an award-winning environmental education program designed for educators who work with children from ages pre-K-12. You will get lesson plans and other instructional materials as well as six OPI renewal credits. Click on the link below to access registration information: <u>Project Learning Tree Registration</u>

Participate in the Largest Chemistry Experiment Ever!

2011 has been named as the International Year of Chemistry (IYC 2011). It is a global celebration of the achievements of chemistry and its contributions to the well-being of humankind. Teachers and students from around the world are invited to explore one of Earth's most vital resources, water. Through the Global Chemistry Experiment 'Water: A Chemical Solution' students will explore the chemistry of water and the role of water in society and the environment. The results of their investigations will contribute to a Global Experiment, which will possibly become the biggest chemistry experiment ever. For more information visit:

http://water.chemistry2011.org/web/iyc





All School Science Day at Bissell School

Students at Bissell School in Olney participated in their second annual All School Science Fair. This tremendous event celebrated the hard work students have been doing over the last few months in science. Kindergarten students presented what they learned about Montana wildlife survival in a morning kick-off assembly. Later, first graders presented on light and second graders presented on mixtures. Throughout the day fifth through eighth graders made formal presentations before their parents and other audience members on a variety of topics such as: What substance is the best for melting ice? How does an electric guitar work? During the afternoon third and fourth graders shared their group projects in the gym in a gallery walk format.

The Bissell School science fair was an all-school collaboration with each teacher providing assistance in some way. Not only did the mathematics and science teacher help students understand the inquiry process but the school librarian assisted students with their research. The art teacher helped students with their display boards while the technology teacher helped students in making PowerPoint or Prezi presentations to share with the audience. The communication arts instructor also helped students to organize their findings into scientific research papers, and the special education teachers helped students on all fronts. What a tremendous team effort!



Students at Bissell School proudly show off their medals from the All-School Science Fair!



Bissell third and fourth graders describe their science projects.





Want to get your students excited about Science, Technology, Engineering, and Mathematics (S.T.E.M.) education? Check out the following video that won Change the Equation's "S.T.E.M. is Cool" contest: <u>Activision S.T.E.M. Video</u>

Check out thousands of FREE math and science videos at:

http://www.brightstorm.com/

Frazer School

Art teacher Teresa Heil and the students at Frazer School have created an amazing feeling of community within their school. Each year students create beautiful designs based around a theme Ms. Heil provides such as "Faces of Our Future." Then, these designs are turned into tiles that are placed around the school. Not only are these tiles a beautiful and colorful piece of art but they also celebrate the special family that is Frazer School!











Deadline Approaching for 2011 Talent Pool Nominations

In Montana, we know that our great educational outcomes are the result of the combined efforts of parents, students and educators. Each year, the Office of Public Instruction asks for recommendations of outstanding educators and administrators for the Superintendent's Talent Pool.

Do you know an educator who demonstrates exceptional instructional ability, is inspiring and exhibits professional leadership?

To recommend an outstanding educator or administrator in your area, please complete the <u>Talent Pool Recommendation Form</u>. You may fill it out and submit it electronically, fax it to 444.2893 or mail it to the address on the form.

May 15, 2011 is the cutoff date to nominate an educator for the 2010-2011 school year. Members of the Superintendent's Talent Pool may be considered for special recognition programs and awards as well as placement on advisory boards. Some awards or board appointments require additional information. If the person you submit qualifies, the Office of Public Instruction may call you to fill out the extended form. Recommendations must be confidential and nominees must not know they are being considered.

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